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Comparison of UK paediatric consultants' participation in child health research between 2011 and 2015

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ABSTRACT

Objective: To identify whether there have been changes over time in the capacity of paediatric consultants to undertake research and if the activity differs between men and women.

Design: Comparison of data from two surveys of UK paediatric consultants.

Subjects: UK consultant members of the Royal College of Paediatrics and Child Health (RCPCH).

Interventions: Surveys carried out in 2011 and 2015.

Main outcome measures: The proportion of consultants with allocated time in job plans for research, academic appointments, post-graduate qualifications, publications, grant funding and supervision of PhD students.

Results: The 2015 survey demonstrated 20% of consultants had one or more programmed activities (PAs) for research but the average paid PA for research was 0.39 PA. Between the surveys, the proportion of consultants with honorary contracts had declined and the proportion with a PhD or MDRes was 32% in 2011 compared to 26% in 2015 ($p<0.001$). In 2015, only 12% of consultants had at least one current grant. In 2011 and 2015, 51% and 54% respectively of consultants had not authored a publication in the preceding two years. In 2015, 92% of consultants were not currently supervising a PhD student and 88% had never supervised a PhD student. In 2015, 25% of men and 12% of women had PAs for research ($p<0.001$). Women were less likely to hold an honorary or primary academic contract, have authored a publication or supervised a PhD student (all $p<0.001$).

Conclusion: Research activity amongst paediatric consultants remains low, particularly amongst women.

INTRODUCTION

The Royal College of Paediatrics and Child Health (RCPCH) considers that involvement in and support for child health research should be embedded in the work of every paediatrician throughout their careers. As a consequence, the RCPCH has conducted reviews over time to assess such activity. In 2011, a survey was conducted of consultant and staff associate specialist and specialty doctor (SAS) paediatricians recorded in the RCPCH medical workforce census of 2009.[1] The response rate was 67% and highlighted a low level of research involvement.[1] Furthermore, the number of paediatricians with a primary academic contract recorded in the RCPCH medical workforce census had decreased year on year.[2] In 2012, in a report, *Turning the tide: Harnessing the power of child health research* [3] the RCPCH stressed the importance of child health research to patients and populations and emphasised the need to increase research activity in child health. It was then of concern that, with the pressures facing clinical services, the ability of the paediatric workforce to contribute to child health research was shown to be declining.[4] The RCPCH has, therefore, undertaken a further survey in 2015. Our aim was to determine whether the level of paediatrician involvement in research had changed since the 2011 survey. As more than 50% of consultant paediatricians are women, an additional aim was to determine if there were any differences in research activity by sex.

METHODS

In 2011, all consultants and SAS doctors recorded in the RCPCH 2009 workforce census were identified (n=4549). Of those, 100 were not contacted (Figure 1). The remaining doctors (n=4449) were sent a survey via SurveyMonkey® which included questions about their research activity (Appendix 1). The survey was undertaken between November 2011 and January 2012. In 2015, all consultants and SAS doctors recorded in the RCPCH 2013 workforce census and any new CCT holders in paediatrics qualifying up to May 2015 were

identified (N=4768). Of those, 435 were not contacted as they had either opted out of email or survey contact, had not provided the RCPCH with their email address, had retired or moved overseas. The others (n=4333) were sent a survey via SurveyMonkey® asking about their research activity (Appendix 2). The survey was undertaken between May and July 2015. Additional information was gathered in the 2015 survey which included asking respondents how much time (programmed activities (PAs)) they had allocated for research in their job plans and how much time they spent on research work. Consultants were asked how many PhD students they were currently supervising and how many they had successfully supervised throughout their consultant careers. In the 2015 survey, RCPCH members were also asked whether they were members of a funding board or a research committee. Data were also extracted from the RCPCH Medical Workforce Census 2013.[2]

Analysis

Only results from consultants were analysed as there were relatively small numbers of other grades who responded (Figure 1). Respondents were divided into those who were general or community paediatricians or were in a specialty e.g. neonatology, subsequently referred to as specialists. Differences in responses to questions common to both surveys and by sex were assessed for statistical significance using the Z test.

RESULTS

The response rate by paediatric consultants in 2011 was 72% (n=2352) and in 2015 44% (n=1924). In 2011, 44% of respondents were specialists, compared to 26% of the overall workforce ($p<0.001$) and in 2015, 39% of respondents were specialists compared to 33% of the overall workforce ($p<0.001$).

The proportion of consultants spending time on research was 36% in 2011 and 49% in 2015 ($p<0.001$). The 2015 survey highlighted that 285 (20%) of consultants had one or more PA for research, however, 706 (49%) were spending more time on research than allocated in their job plan. Averaged across all respondents, consultants spent a mean of 0.71 PA for research per week, but were paid for 0.39 PAs. A lower proportion of women compared to men had PAs for research in their job plan ($p<0.001$); and a greater proportion of men spent time on research not accounted for in their job plans ($p<0.001$) (Table 1).

In 2011, 32% of respondents had either a PhD ($n=148$) or MDRes ($n=602$); corresponding figures for 2015 were 26% (PhD 125; MRes 309) ($p<0.001$). In 2011, 48% of respondents held honorary appointments compared to 37% in 2015. In 2011, 6% of respondents had a primary academic appointment compared to 5% in 2015 ($p=0.06$). In 2015, women represented 51% of consultant respondents, but only 40% of those with an honorary academic appointment and 25% of those with a primary academic appointment ($p<0.001$) (Table 2). There were no significant differences between the proportions of women with either honorary or a primary academic appointments between 2011 and 2015 ($p=0.74$, $p=0.41$ respectively).

The 2015 survey demonstrated 1448 consultants (92%) of respondents were not currently supervising a PhD student and 88% had never supervised a PhD student; 6% of women were currently supervising a PhD student, compared to 11% of men ($p<0.001$); 9% (61/703) of women had ever supervised a PhD student compared to 17% of men ($p<0.001$).

The proportion of consultants authoring no publications in the two years prior to each survey was 51% in 2011 and 54% in 2015 ($p=0.116$) (Table 3). The average number of

publications produced per whole time equivalent consultant was lower for women in both 2011 and 2015 ($p<0.001$) (Table 1). In 2015, 1477 respondents (88%) did not hold any grants; 12% respondents held one or more grants. Of the 198 who held one or more grants, 38% were women.

In 2015, 1573 (94%) consultants were not members of a funding board or a research ethics committee. Of those who were members, 22 sat on a charity research committee/advisory board, 19 an NIHR Scientific Advisory Board, 10 the MRC Scientific Advisory Board, 15 a NRES research ethics committee, 12 a special interest groups and 10 a local research ethics committee. Certain respondents sat on one or more committee/board.

DISCUSSION

We have identified a decline in the proportion of consultant paediatricians with a primary academic appointment between 2011 and 2015. In 2015 only a minority of consultant paediatricians had allocated time in their job plan to contribute to research. Furthermore, a minority of respondents held research grants or had authored a peer reviewed publication in the two years prior to each survey. We found that women had significantly less evidence of research involvement compared to men. In both surveys, a greater proportion of responses were received from specialists compared to general paediatricians. As specialists may be more likely to be research active, our results may have overestimated the true level of research activity and output.

The Royal College of Physicians (RCP) undertook a survey of 2000 doctors across all specialities including medical students and career stages in 2015.[5] Their results highlighted that doctors want to be more engaged in research and, in keeping with our study, found that many do not currently have the time, funding or skills to realise their potential.

They too demonstrated that men were more likely to be engaged in research. In addition, they found that women felt less confident about their research skills than men and found it harder to fit research activity with family life. Both surveys then highlight it would be important to have focused activities to ensure women achieve their full potential with regard to research.

The response rate to our later compared to the earlier survey was lower. In the earlier survey, the survey had a wider remit than research, although a number of questions about research were included. The later survey, however, was specifically about research and this was indicated by the title (Appendix 2). We, therefore, speculate that those not involved in research may have been less likely to respond to the later survey. This may explain why the proportion of consultants involved in research had apparently increased from 2011 to 2015. It may mean then that the decline in research activity amongst paediatric consultants overall may be even greater.

We included data on PhD students as this was collected in the 2011 survey. The numbers of PhD, not MDRes, students are returned in exercises such as the Research Excellence Framework and hence we also thought these data would be more accessible and accurate. The number of consultants undertaking research activity, including in their own time, was much greater than the number of current PhD students. This may reflect that their research activity includes recruitment into clinical studies/trials.

The Medical Schools Council reported a survey of staffing levels of medical clinical academics at UK medical schools as of July 2015.[6] They reported that the workforce for academic medicine as a whole was at best stable compared with the year on year growth of NHS staff. In Child Health, we have also seen growth in NHS staff, but sadly have highlighted a marked decline in the academic workforce.[7] The Medical Schools Council (MSC) further emphasized the substantial impact of NIHR funding in England and that work

is actively being pursued to support early stage clinical academics. Child health has particularly benefited from NIHR support with a large number of integrated academic trainees. The MSC report demonstrated that female representation in the academic work force was slowly increasing with greater growth at the more junior grades, although there were major differences between specialities. Indeed, we report that females fared worse in all aspects of research including a lower number of dedicated PAs, fewer have an honorary or substantial academic contract and a lower proportion had publications or grants. Athena Swan has resulted in important changes in UK Medical Schools in appropriately supporting female academics. It is important to understand why there appears to be an ongoing gender effect and hence how the RCPCH can reverse it.

The Medical Schools Council 2015 survey [6] demonstrated a 3% decline in Reader/Senior Lecturer numbers, but the Professorial numbers continued to increase, but at a slower rate than in the previous six years. The NHS, including the NIHR, funds 44% of all clinical academic posts with a 43% contribution from the Higher Education Funding Councils. The contribution of NHS Funding has increased by 20% since 2006, with the majority of this funding allocated to Lecturer posts. More than half of the Medical Schools in the survey [6] reported difficulties in recruitment to particular specialities including paediatrics and child health [6]. Reasons given included a small pool of suitable candidates, a shortage of trainees and concerns about roles not contributing to the Research Excellence Framework due to the intensity of clinical work. Unfortunately, in paediatrics we have a shortage of trainees.[8] This may lead to an increased workload for consultants and their reduced capacity to undertake research. The United Kingdom Child Health Research Collaboration is a partnership of child health research funders supporting increasing research capacity which will hopefully help to address the problem. The RCPCH is undertaking a number of initiatives to assist paediatricians who would like to contribute to research. This is essential, as a strong independent association between survival and participation in interventional clinical studies has been shown.[9] The initiatives include advocating for appropriate job

plans to undertake teaching and research, as well as clinical care. The RCP have recommended that Trusts should take steps to ensure doctors have protected time for research and can make efficient use of that time.[5] The RCPCH highlights and promotes key research successes by paediatricians and demonstrates where research has led to change and produced better outcomes for children. As part of the Future Hospital project, the Royal College of Physicians has published case studies of increased research capacity and improved patient participation at a local level.[10, 11] The RCPCH considers that all doctors should be able to understand and interpret research in order to incorporate best evidence into their clinical decision-making. Child health research requires specific competences including the ability to communicate effectively and engage with parents, carers and children and young people. The RCP has recommended that more is needed to enable doctors to acquire essential research skills. Following the publication of the Shape of Training report,[12] the RCPCH has commenced a review of the training pathway and curriculum to widen opportunities for trainees to be involved in research. A research training day led by British Association of Perinatal Medicine and supported by the RCPCH has been held [13] with the intention of extending this to trainees in other specialities.

The RCPCH established and provides support to the UK Child Health Research Collaboration of more than forty charities which fund child health research. It was formed to foster collaboration in growing research.[14] The RCPCH has also established an information hub providing details of grant calls, closing dates and eligibility criteria with the assistance of UKCHRC available on the RCPCH website.[15] The RCPCH has launched a Children's Health Research Capacity Development Fund [16] to support the next generation of child health research leaders. The RCPCH & Us network provides a platform for facilitating the involvement of children, young people and their parents and carers in child health research.[17] In addition, the RCPCH has developed an Infant, Children and Young People's Research Charter to support children, young people, families and health professionals in discussions about research.[18] It provides guiding principles for those who

seek to involve children and young people and their families in research and signposts relevant resources.

The RCPCH Medical Workforce Census demonstrated that paediatricians increasingly wish to work less than full time and many are already doing so.[2] Academic paediatric trainees, however, feel that flexible working would be negatively viewed by funding bodies.[19] We hope working within UKCHRC, we will be able to reassure trainees and funders that less than full time working is productive and should be supported.

In conclusion, we have demonstrated that research capacity amongst paediatric consultants remains low with women less active than men. The RCPCH remains committed to increasing the involvement of all paediatricians in research.

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What is already known on this topic?

- Child health research is important to improve patient outcomes and advance the science of paediatrics
- There had been a decline in the number of academic paediatricians at honorary consultant grade prior to 2011.

What this study adds

- Between 2011 and 2015 there has been a further decline in paediatric consultants with a primary academic contract.
- In 2015, a minority of consultant paediatricians had programmed activities (PA) for research.
- Women consultants had fewer PAs for research and less author publications and hold fewer grants.

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Table 1: Research activity by gender in 2015

Data are presented as percentages or n (unless specified)

| | Male | Female |
|---|-------------|---------------|
| Research PAs in the job plan | 25% | 12% |
| Time spent on research not allocated for in the job plan | 53% | 39% |
| Average number of publications per WTE: | 3.6 | 1.9 |

Table 2: Primary academic appointment by gender

| | | 2011 | | 2015 | |
|----------------------------|------------|--------|------|--------|------|
| | | Female | Male | Female | Male |
| Professor | n | 13 | 60 | 12 | 32 |
| | % of grade | 18% | 82% | 27% | 73% |
| Reader | n | 6 | 17 | 2 | 9 |
| | % of grade | 26% | 74% | 18% | 82% |
| Senior lecturer | n | 20 | 38 | 12 | 19 |
| | % of grade | 35% | 66% | 39% | 61% |
| Total academic consultants | n | 39 | 115 | 26 | 60 |
| | % | 25% | 75% | 30% | 70% |
| Total consultants | n | 1086 | 1266 | 850 | 820 |
| | % | 46% | 54% | 51% | 49% |

Table 3: Consultant paediatricians' publication output in the two years prior to each survey

The data are demonstrated as n (%)

| | 2011 | | 2015 | |
|-------------------------------|------------|-------------|------------|-------------|
| | None | One or more | None | One or more |
| Chapters in textbooks | 1712 (80%) | 424 (20%) | 1141 (82%) | 254 (18%) |
| Peer reviewed research papers | 1313 (62%) | 823 (39%) | 910 (65%) | 486 (35%) |
| Review articles | 1625 (76%) | 511 (24%) | 1075 (77%) | 320 (23%) |
| Textbooks | 2057 (96%) | 79 (4%) | 1344 (96%) | 51 (4%) |
| Any publication | 1097 (51%) | 1039 (49%) | 754 (54%) | 641 (46%) |

FIGURE LEGEND

Figure 1: Response rates in 2011 and 2015

APPENDIX 1

RCPCH Individual Survey 2011: Survey questions

1. Are you a member of the RCPCH? *[Yes/No]*
2. Why have you chosen not to be a member of the RCPCH? *[Free text]*
3. What type of membership do you hold? *[Fellow, Ordinary Member, Associate Member, Junior Member, Senior Member, Student Affiliate, Honorary Fellow, Not known]* W
4. Do you hold any RCPCH positions? *[Yes/No]*
This should include officer positions, committee membership, tutorship, examiners and trainers, and membership of the guideline consultation group.
5. Please list the position/s you hold at the College. *[Free text]*
This should include officer positions, committee membership, tutorship, examiners and trainers, and membership of the guideline consultation group.
6. Please provide a breakdown of the number of hours spent per week on your College position/s, both paid for (i.e in job plan and paid for by Trust or College) and not paid for (i.e. not paid for and done in own time):

Hours per week paid for: *[Number]*

Hours per week not paid for: *[Number]*
7. Please provide a breakdown of the number of hours spent per week on your College position/s, both paid for (i.e in job plan and paid for by Trust or College) and not paid for (i.e. not paid for and done in own time):

Hours per week paid for: *[Number]*

Hours per week not paid for: *[Number]*
8. Do you hold any **postgraduate** qualifications? *[Yes/No]*

9. Please select the type of postgraduate qualification you hold, and the year and country of graduation:

| | Type of qualification | Year qualification awarded | Country of graduation |
|-----------------|-----------------------|----------------------------|-----------------------|
| Qualification 1 | | | |
| Qualification 2 | | | |
| Qualification 3 | | | |
| Qualification 4 | | | |

10. What is your primary appointment? *[Consultant, Post CCT Fellow, Professor, Reader, Senior Lecturer, Lecturer, Specialty Doctor, Staff Grade, Associate Specialist, Senior Clinical Medical Officer, Clinical Medical Officer, Trust Doctor, Other (please specify)]*
11. What type of contract is your primary appointment? *[Permanent, Fixed term, Locum - known term, Locum - unknown term, Not known]*
12. Do you hold any honorary appointments? *[Yes/No]*
13. Please select all honorary appointments that apply: *[Consultant, Professor, Reader, Senior Lecturer, Lecturer, Clinical Teacher]*
14. Do you hold any of the following medical management roles? *[Medical Director, Clinical Director, Clinical Lead, Regional Clinical Lead, National Clinical Lead, Designated Doctor (any role), Other (please specify)]*
15. Do you hold any clinical excellence awards? *[Yes/No/Not applicable]*
16. Which of the following **clinical excellence awards** do you hold? *[Platinum, Level 12 Gold, Level 11 Silver, Level 10 Bronze, Level 9, Level 8, Level 7, Level 6, Level 5, Level 4, Level 3, Level 2, Level 1]*
17. If you are a Staff, Specialty and Associate Specialist Grade (SSASG) doctor, do you hold discretionary points? *[Yes/No/Not applicable]*
18. How many discretionary points do you hold? *[Number]*
19. Which of the following most closely describes your job type? *[Specialist in a tertiary centre, Specialist in a DGH / Other centre working in a managed clinical network, 100% General Paediatrician, 75% General / 25% Community, 50% General / 50% Community, 75% Community / 25% General, 100% Community, Community paediatrician with a special interest, Non paediatric specialist]*
20. What is your subspecialty? *[Drop down list of paediatric subspecialties, other (please specify)]*
21. Which of the following *on call rotas* do you participate in? *[General paediatric, Neonatal, Subspecialty, None]*

22. Is your job plan measured in Programmed Activities (PAs) or Whole Time Equivalent (WTE)? *[PAs/WTE]*

23. How many PAs are you paid for in total? *[Number]*

24. For each of the following types of work, please indicate where the work is carried out, the approximate PAs per week spent, and remuneration status.

| | Location of PAs | Approximate number | Remuneration status |
|---|-----------------|--------------------|---------------------|
| Direct clinical care | | | |
| Teaching/training/examination | | | |
| Research | | | |
| Service improvement/ audit/ clinical governance | | | |
| CPD/job planning/appraisal | | | |
| Medical management | | | |
| Other | | | |

25. Please use the box below to provide further explanation about your remuneration if appropriate. *[Free text]*

26. What Whole Time Equivalent (WTE) are you paid for? *[Number]*

27. Do you currently undertake any private practice? *[Yes/No]*

28. Please specify the approximate number of hours spent per week on private practice for personal remuneration. *[Number]*

29. Please specify the approximate number of hours spent per week on private practice for institutional remuneration. *[Number]*

30. Are you a member of a MRC/Wellcome/NIHR Scientific Advisory Board? *[Yes/No]*

31. Are you a member of a National Research Ethics Service Research Ethics Committee? *[Yes/No]*

32. How many of the following on which you have been an author have been published in the last two years (1 October 2009 to 30 September 2011)?

| | Number |
|--|--------|
| Peer reviewed original research papers | |
| Review articles | |
| Chapters in textbooks | |
| Textbooks | |

33. On the date of this census (30th September 2011) are you the principal award holder on grants from any of the following? *[Wellcome Trust, Medical Research Council, National*

Institute for Health Research, Department of Health, European Union, National research charity, Local research charity, Industry, None, Other government agencies (please specify)]

34. On the date of this census (30th September 2011) are you the co-award holder on grants from any of the following? *[Wellcome Trust, Medical Research Council, National Institute for Health Research, Department of Health, European Union, National research charity, Local research charity, Industry, None, Other government agencies (please specify)]*

35. How many trainees do you act as educational supervisor for?(Please enter 0 if none)

ST1 - ST3 *[Number]*

ST4 - ST8 *[Number]*

Non-training grades *[Number]*

36. How many registered PhD/MD students are you principal supervisor to? (Please enter 0 if none)

Number of PhD/MD students *[Number]*

37. Do you have PAs allocated in your contract for resident shift working? *[Yes/No]*

38. Which statement best describes how you feel about resident shift working? *[I would not consider the option under any circumstances, I would consider if it was time-limited and part of structured career development, I would be happy to work like this (not averaging more than 4 PAs per week) for my entire career if requested.]*

39. At what age would you like to retire? *[50-54, 55-59, 60-64, 65-69, 70 +, No preference]*

40. If current government proposals to reduce the size of pensions becomes law, which statement best reflects how this would influence your retirement plans? *[It would make no difference, I would plan to retire earlier, I would plan to retire later, I would take earlier retirement and work in private practice].*

Thank you for completing the Census 2011: Individual Survey.

If you have any further comments regarding the content of this questionnaire, please use the comments box below: *[Free text]*

APPENDIX 2

RCPCH Participation in Child Health Research Survey 2015: Survey questions

SECTION 1: You and your role

1. What is your primary appointment? *[Consultant, Professor, Reader, Senior lecturer, Specialty doctor, Staff grade, Associate specialist, Trust doctor, Not currently employed as a doctor, Other (please specify)]*
2. Where are you currently working? *[England, Wales, Scotland, Northern Ireland, Overseas]*

If answered Overseas to question 2:

SECTION 4: Thank you

Thank you very much for taking the time to complete this questionnaire. As you are currently working overseas or are not currently employed as a doctor, and this survey is about involvement in research of UK paediatricians, there are no more questions for you to answer.

If you have any questions or comments about this survey, you can contact the workforce team by email: workforce@rcpch.ac.uk or by calling 0207 092 6156.

If answered England, Wales, Scotland, Northern Ireland to question 2:

3. What type of organisation are you currently working for? *[NHS trust or health board, Private organisation, University, Other (please specify)]*
4. Do you hold any honorary appointments? *[Yes/No]*
5. Please select which honorary appointment applies: *[Consultant, Professor, Reader, Senior lecturer, Lecturer, Other (please specify)]*
6. Which of the following most closely describes your job type? *[Specialist in a tertiary centre, Specialist in a DGH/ Other centre working in a managed clinical network, 100% general paediatrician, 75% general/ 25% community, 50% general/ 50% community, 75% community/ 25% general, 100% community paediatrician, Community paediatrician with a special interest, General paediatrician with a special interest, Other (please specify)]*
7. What is your subspecialty? *[Dropdown list of paediatric subspecialties]*
8. What is your special interest? *[Free text]*
9. Do you hold any postgraduate qualifications? *[Yes/No/Not sure]*

Please answer yes if you hold any postgraduate qualification in addition to your primary medical qualification.
10. Please select the type of postgraduate qualification you hold, and the year and country of graduation:

| | Type of qualification | Year awarded | Country of graduation |
|-----------------|-----------------------|--------------|-----------------------|
| Qualification 1 | | | |
| Qualification 2 | | | |
| Qualification 3 | | | |
| Qualification 4 | | | |

11. How many Programmed Activities (PAs) are you paid for in total per week? *[Number]*

12. For research work, please indicate where the work is carried out, the approximate PAs per week in your job plan, approximate PAs actually spent, and who pays for the work. (Please select 0 if none.)

| | Approx. PAs in job plan | Approx. PAs actually spent | Who pays? | Location |
|----------|-------------------------|----------------------------|-----------|----------|
| Research | | | | |

13. For all other types of work, please indicate where the work is carried out, the approximate PAs per week in your job plan, approximate PAs actually spent, and who pays for the work. (Please select 0 if none.)

| | Approx. PAs in job plan | Approx. PAs actually spent | Who pays? | Location |
|---|-------------------------|----------------------------|-----------|----------|
| Direct clinical care | | | | |
| Teaching/training/examination | | | | |
| Service improvement /audit /clinical governance | | | | |
| CPD/job planning/appraisal | | | | |
| Medical management | | | | |
| Other | | | | |

SECTION 2: Your involvement in research

14. Are you a member of any of the following research boards or ethics committees?
 [Medical Research Council Scientific Advisory Board, Wellcome Trust Scientific Advisory Board, National Institute of Health Research Scientific Advisory Board, National Research Ethics Service research ethics committee, None, Other (please specify)]

(Please tick all that apply)

15. How many of the following on which you have been an author have been published in the last 2 years (prior to 29 May 2015)?

(Please select 0 if none.)

| | Number |
|--|--------|
| Peer reviewed original research papers | |
| Review articles | |
| Chapters in textbooks | |
| Textbooks | |
| Case reports | |

16. On the date of this survey (29 May 2015) are you the principal award holder on any grants? Please indicate below whether you hold a grant, the number of grants held and the total value of grants held.

(Please select 0 if none.)

| | Number of grants held | Total value of grants held |
|--|-----------------------|----------------------------|
| Wellcome Trust | | |
| Medical Research Council | | |
| National Institute for Health Research | | |
| Department of Health | | |
| European Union | | |
| National research charity | | |
| Local research charity | | |
| Industry | | |
| Other (please specify) | | |

17. How many registered PhD/MD students are you principal supervisor to? [Number]

(Please select 0 if none.)

18. How many PhD/MD students have you successfully supervised in your career? [Number]

(Please select 0 if none.)

SECTION 3: Public and patient involvement in research and service development

19. Which statement best describes how you feel about public and patient involvement in research in your organisation? *[Patient and public involvement is central to research in my organisation, Patients and the public are involved in research in my organisation, but it can be tokenistic, There is little or no involvement of patients and the public in research in my organisation, I'm not sure, Other (please specify)]*

20. Which statement best describes how you feel about public and patient involvement in service improvement in your organisation? *[Patient and public involvement is central to service improvement in my organisation, Patients and the public are involved in service improvement in my organisation, but it can be tokenistic, There is little or no involvement of patients and the public in service improvement in my organisation, I'm not sure, Other (please specify)]*

21. What support do you have within your organisation to involve public and patients in research and service improvement?

(Please tick all that apply)

[Public and patient involvement team, Public and patient involvement lead, Children and young people's volunteer group, Parent and carer's volunteer group, Mixed volunteer group, Don't know, None of the above]

22. Are there any other types of support available in your organisation not covered above? *[Free text]*

23. For each of the types of support you have within your organisation, please rate how useful you find it on a scale of 1-5 (1 = Very useful and 5 = Not at all useful).

| | 1 | 2 | 3 | 4 | 5 |
|---|---|---|---|---|---|
| Public and patient involvement team | | | | | |
| Public and patient involvement lead | | | | | |
| Children and young people's volunteer group | | | | | |
| Parent and carer's volunteer group | | | | | |
| Mixed volunteer group | | | | | |

24. In your experience, what works well, and why? *[Free text]*

Please share your examples of best practice in patient and public involvement. Where possible, please include references or web links.

25. What are the challenges for you in involving the public and patients in research and service improvement? *[Free text]*

26. How can RCPCH best support you in involving the public and patients in research and service improvement? *[Free text]*

27. Would you be happy for us to contact you about working with the RCPCH's children, young people and families' engagement network &Us? *[Yes/No]*

SECTION 4: Thank you

28. Thank you very much for taking the time to complete this questionnaire. If you have any additional comments about the survey in general or about particular questions, please use the box below: *[Free text]*